Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_

**Beak Evolution in Lalabirds**

Pre-AP Biology, Mrs. Krouse

**Directions:** Today you will be investigating the evolution of beak shape in lalabirds. You and your group members will act as lalabirds. Each of you will have a different beak shape (i.e., a large binder clip, a small binder clip, a spoon, and a clothespin). You will use these “beaks” to collect as many plastic beads as you can from the tray in two minutes and place them in a plastic cup. The beads are supposed to represent bugs eaten by the bird. The cup is supposed to represent the bird’s stomach. The color of the beads you collect does NOT matter.

The two birds that collect the most beads in the two minutes will survive and reproduce. The two birds that collect the fewest beads in the two minutes will die off.

**Data:** Record the number of bugs (beads) “eaten” by each bird over two minutes in the chart given below.

|  |  |  |
| --- | --- | --- |
| **Bird #** | **Beak Type** | **Number of Bugs Eaten** |
| 1 | Large binder clip |  |
| 2 | Small binder clip |  |
| 3 | Spoon |  |
| 4 | Clothespin |  |

**Follow-Up Questions:**

1. Can an individual bird change his/her beak? Explain your answer using the term “mutation.”
2. Which two beak types were most effective at gathering bugs (beads)? Why was this the case?
3. Which two beak types were least effective at gather bugs? Why was this the case?
4. Explain how the bird population will evolve over time due to natural selection. Use the terms adapt, adaptation, survival, and reproduction in your answer.
5. What is the selection pressure in this environment?